

SH1 L Phillips Rd to Pūhoi speed review

Summary of speed review consultation

WAKA KOTAHI NZ TRANSPORT AGENCY MAY 2021

BACKGROUND

Our vision is a New Zealand where no-one is killed or seriously injured on our roads. We are always looking for ways to improve the safety of our roads and making speeds safer for all road users is one part of our 'safe system' solution to achieve this. This safe system solution is aligned with our road safety strategy, Road to Zero, which sets a target of a 40% reduction in deaths and serious injuries by 2030. Setting safer speed limits is one way we can achieve this target.

Under our speed management programme, we have been identifying the roads where safer speed limits will result in the greatest reduction in deaths and serious injuries as quickly as possible, and where we know communities have been calling for change. SH1 between L Phillips Rd (near Sheepworld) and Pūhoi is one of those roads, and over the last couple of years we have been reviewing the speed limits along that route.

WHAT WE KNOW ABOUT THIS ROUTE

- Over 23,000 vehicles travel the route each day with vehicle numbers increasing.
- While vehicle numbers on this route will reduce once the new Pūhoi to Warkworth motorway is open (scheduled for mid-2022), we expect traffic volumes will still be high (over 6,000 vehicles per day).
- There are tight and difficult corners along parts of this SH1 route as well as very narrow shoulders and poor visibility.
- Between 2010 and 2019, 10 people were killed and 47 seriously injured in crashes on this stretch of road.
- People have told us they feel there is safety risk on the road at the Mahurangi West Road due to previous crashes here.
- Along with the devasting effect on families and communities, crashes on this route can cause extensive delays and long detours if there are road closures.
- There are planned infrastructure improvements in the area of SH1 between Hudson Road and Kaipara Flats Road, including the link and roundabout from the new Ara Tūhono - Pūhoi to Warkworth motorway.
- We are currently working on safety improvements on SH1 through Dome Valley including installing flexible wire safety barriers, widening the existing road, reshaping embankments, and building right-turn bays at L Phillips Road and Top of the Dome rest area.

Note: Statistics are correct at the time they were produced.

CONSULTATION PROCESS

Prior to undertaking the formal consultation process, we completed numerous steps, including a speed management technical assessment of the road. This identified the various existing speed limits on the road were not safe and appropriate for the current road characteristics and roadside environments along this corridor.

In October 2019 we engaged with the local community, the council, the local police, road user groups and local businesses to understand people's views and local knowledge on current and proposed speed limits along this corridor. Feedback from engagement helped us to decide if a speed limit change was the best thing to do to improve road safety, where new speed limits could begin or end, and if any other safety improvements might be needed.

In May and June last year we formally consulted with the public on these proposed changes seeking any additional information we should consider before making our decision on any speed

limit changes. Consultation was open for four weeks, and was advertised on radio stations, through social media, on our website and in local newspapers.

Consultation materials provided evidence that supported the proposed safe and appropriate speed limits. This included current travel speeds and the characteristics of the road. People were able to submit their views through the electronic submission form, a printed hard copy submission form, and via email.

CONSULTATION QUESTION

The consultation phase is used to seek any additional information from stakeholders or the public that will help inform the decision about the proposed speed limit changes.

During formal consultation we proposed new speed limits and asked the public the following question "Are there any other factors that we should consider when making our decision?"

We consider all factors raised during formal consultation when making our decision on new speed limits.

SUMMARY AND RESPONSE TO SUBMISSIONS

We received 260 submissions and thank everyone who provided their feedback. We have considered all the submissions to see if there are any other factors that we should be aware of when making our decision on setting speed limits that are right for the road and safe for all road users.

Feedback indicated diverse sentiment for our proposed speed limit changes, with some submitters asking why we can't lower the speed limits immediately, and others suggesting we keep the speed limit at 100km/h until the new Pūhoi to Warkworth motorway opens around mid-2022. There were some suggestions to address dangerous points along the route including at Mahurangi West Rd and Moir Hill Rd intersections, and some of the overtaking lanes with sharp bends.

The main reasons people provided for not supporting the proposed speed limit changes was around poor driver behaviour, enforcement, and road conditions. Many also expressed strong sentiment that the proposed changes appear driven by a need for Waka Kotahi to encourage more people to use the new motorway and thus increase revenue from the toll.

The following table summarises the key factors raised during consultation:

Factors raised in consultation Waka Kotahi response Traffic volumes, and associated Traffic volumes on this corridor are Traffic volume/ inherent dangers, will decrease currently around 20,000 vehicles **New motorway** once new motorway opens and per day. While this volume will traffic volumes on alternative reduce once the new motorway is route decrease - so why drop open, we expect traffic volumes to still be high (well in excess of 6,000 the speed limit? vehicles per day). Use VSLs to reduce speed limits Research suggests that above to 80km/h for temporary 6,000 vehicles per day, a crash increases in traffic volumes due involving a vehicle crossing the to new motorway closures. centreline is more likely to be a head-on crash (involving multiple occupants) than a run-off-road crash (to the right). Research also suggests that forces from a headon crash are generally survivable at impact speeds of 70km/h - this supports a speed limit of 80km/h with some braking. This also supports why we are

		not considering a variable speed limit for this corridor.
Speed limits around new motorway and Matakana Link Rd	What is the extent of the 60km/h zone at the new roundabout?	During consultation, we specified the location of this 60km/h zone as "from 200m north of Kaipara Flats Road to 365m north of Hudson Rd. While we are yet to confirm the location for the motorway leg, it would need to be within 20m of the current SH1 (or as near as practicable to that point). We will let people know further details of locations once these are confirmed.
	What impact will the new Matakana Link Rd have on speed limits?	This is covered in Phase Two (after construction of the roundabout) where we are proposing to further reduce the speed limit to 60km/h. This reduction to 60km/h would be for the section from 200m north of Kaipara Flats Road to 365m north of Hudson Rd which includes the new Matakana Link Road. We are proposing this further reduction so that the speed limit into and out of the roundabout is safer for people driving in this new urban environment where decisions and lane changes will need to be made to enter the new motorway, Warkworth or Matakana Link Road.
	Reducing to 60km/h at new roundabout won't save any lives but will increase driver frustration.	Research suggests for every 1% change in mean speed there is a corresponding change in deaths (4%) and serious injuries (2-3%). However, that is not the main driver for extending the 60km/h speed limit out past the roundabout. With the construction of the roundabout the environment will change substantially from what it is like now. There will be multiple lanes on each approach to the roundabout, lanes that bypass the roundabout in all directions and road users will need to make decisions about which lane to be in to get where they are going. There will also be significant numbers of movements turning right off the motorway and left into Matakana Link Road (and vice versa) which will require multiple lane changes over this length. Implementing a 60km/h speed limit will allow more time for people to interpret the signage and make the necessary lane changes for their desired destination.
	Ensure roundabout design allows trucks /heavy vehicles to safely negotiate.	We have passed this feedback to the Ara Tühono – Pühoi to Warkworth motorway team.
Driver behaviour	 Dangerous driving is a major issue on this stretch of state highway. 	While poor driving behaviour has resulted in crashes, more crashes are a result of mistakes and even

- Driver education and training are more pressing safety needs than reducing speed limits.
- Don't use poor driver behaviour as excuse to lower speed limits.
- Slower speeds will lead to increased frustration and more risk-taking.
- the most experienced "perfect" driver among us drops the ball sometimes. These mistakes shouldn't result in loss of life or serious injury. Speed is one risk that good drivers can minimise.
- Slow drivers are not significantly implicated as a cause in our crash statistics.
- While poor driving behaviour has resulted in crashes, more crashes are a result of mistakes. These mistakes shouldn't result in loss of life or serious injury.
- Our vision is a New Zealand where no one is killed or seriously injured on our roads. If we are to achieve this vision, we need to create a safe transport system; one that recognises humans make mistakes and is designed so that these mistakes do not need to cost us our lives.

Tolling on new motorway

- Decreasing the speed limit on State Highway 1 is a method for forcing road users to use the new tolled highway and increase revenue.
- Speed limit reduction should only happen if the Pūhoi to Warkworth motorway toll proposal is abandoned or immediate safety improvements are made to alternative route.
- Appears speed reduction is required to ensure new motorway gets increased usage to make money from the toll.
- The motorway is scheduled to open in May 2022, though there's been no decision yet on tolling. If the new Pūhoi to Warkworth motorway is tolled, people can choose to travel on the existing SH1 which will be maintained as a free, safe alternative route.
- While the volume of traffic using this stretch of SH1 will reduce once the new motorway is open, we expect traffic volumes will still be high (well in excess of 6,000 vehicles per day).

Road conditions/safety improvements

- Need regular road maintenance and improved road conditions speed reductions should not compensate for parts of the road that are in poor condition or poorly engineered eg. Schedawys Hill.
- Provide safety interventions such as roadside guard rails and wider shoulders in addition to reducing speed limits.
- Also reduce lane widths to match desired speed environment and provide more space for improving pedestrian and cyclist safety.
- Provide more passing lanes.
- Allow 100km/h on existing and future passing lanes.
- Remove the portions of the passing lanes which make lefthand bends up-hill.
- Designate additional speed restrictions on dangerous bends such as on Schedawys Hill.
- Also put measures in place to prevent the use of passing

- We will continue to provide regular maintenance as we do on all our state highways.
- With the speed limit change we should see drivers travelling at more consistent speeds, reducing the need for overtaking. More consistent travel speeds can also improve traffic flow, as well as reducing crashes.
- The Setting of Speed Limits
 Rule 2017 requires a change in
 speed limit to coincide with a
 change in environment. A
 change from 80km/h to 100km/h
 at the areas suggested by some
 submitters would not make
 sense to motorists as the road
 environment is more or less
 the same.
- Vehicles will be travelling at a more consistent speed that will reduce the need for overtaking and improve traffic flows, as well as reducing crashes. Where vehicles are being overtaken on

	lanes at peak times (Fridays, Saturdays and long weekends). Revisit the dangerous placement of the overtaking lanes at Schollum Access Way.	the passing lane at the new lower speed, there will be less exposure to any possible speeds in excess of the 80km/h speed limit. • We will continue to monitor the existing passing lanes under the new speed limit. Furthermore, we are investigating removal of the southernmost Pohuehue Viaduct passing lane (nearest Cowan Bay Road) as part of this project.
No need to lower current speed limits	 There is no need to reduce the speed along this section of the road. 100km/h is safe and appropriate for this road. 	 The safety features of a road and the speed vehicles travel on it influence both the risk of a crash and whether it is survivable. Speed limits need to reflect the risk of the road. Our assessments identified that this road has a high number of vehicles using it, a high frequency of crashes, and a number of intersections and property accessways along it. Using this information, we determined that 80km/h is the safe and appropriate speed for this stretch of road. Lowering the speed limit on this road means the chance of being killed or seriously injured is reduced and is the most immediate and effective action we can take to reduce deaths and serious injuries on this road.
Other suggestions	Perry Road Intersection Speed Zone (ISZ) Don't support further speed limit reduction here as it is mostly straight, relatively wide, and has good visibility. Isn't this a temporary traffic management tool for the new motorway construction that will no longer be needed once the motorway opens? Is this ISZ intended to be permanent? Why does the speed limit need to be 60 here?	 Perry Road ISZ There is a current intersection speed zone on SH1 at the Pūhoi to Warkworth motorway site access point south of Perry Road. When vehicles are turning at the intersection a 60km/h speed limit will activate. At all other times, the speed limit will be 80km/h. There are a lot of heavy vehicles using this intersection as part of the construction of the motorway project. These vehicles take time to accelerate and decelerate at the intersection, so temporarily reducing the speed limit on the state highway makes it safer for these vehicles to turn into and out of this intersection. At higher travel speeds people have trouble differentiating speed limit differences of just 10km/h. The intersection speed zone is proposed to be 60km/h when the signs are active and 80km/h at all other times (maintaining a 20km/h speed differential). The speed limit is something we can change now, whereas the site access point will still need to be used until the end of construction.

	Moir Hill intersection This is a dangerous intersection. Are there plans for a slip-lane here for north-bound vehicles entering SH1? Safety issue with bus stop on Moir Hill Rd as vehicles on SH1 have crashed into bus stop,	A decision on the longevity of this intersection does not affect our consideration of the speed limit here but we have passed this question about the ISZ on to the Pūhoi to Warkworth motorway project team. Moir Hill intersection • We are aware of safety concerns at this intersection. Slower speed limits along this stretch will make the road safer here, including at the bus stop.
	which is used by school children – how can people at bus stop be protected from this? Cowan Bay Road intersection • Need intersection improvements at Cowan Bay Road – unsafe turning into from north.	Cowan Bay Road intersection We are aware of safety concerns at this intersection. As part of this project we are investigating removal of the southernmost Pohuehue Viaduct passing lane (nearest Cowan Bay Road). Removal of the passing lane would free up space for a right turn bay at this intersection.
	Mahurangi West Road intersection Extend 80km/h speed limit area to at least 1km north of this intersection to improve safety. Puhoi Road intersection Lower speed limit here.	Mahurangi West Road intersection We are lowering the speed limit past Mahurangi West Road intersection to 80km/h to make it safer for people entering and exiting this road. Puhoi Road intersection The speed limit past the Pühoi Road intersection is already 80km/h.
Enforcement	 This corridor needs more police presence/enforcement instead of changing speed limits. Aims to increase government revenue from traffic fines – will cause financial hardship and penalise society's disadvantaged. Needs more enforcement/ enforce with speed cameras to ensure compliance. 	Under the safe system approach, we focus on reducing harm. While we acknowledge that a lack of compliance can often be one of the causes of a crash, a lower speed reduces the severity of the outcome. The lower speed limit will result in fewer deaths or serious injuries.
Pedestrian and cyclist safety	 Needs dedicated cycle lane – this would encourage safer driving. Reducing lane width would provide space for improving cyclist/pedestrian safety. Reduce speed further to make safer for cyclists. How does proposal "Make the road safer for pedestrians and cyclists"? 	 The change in speed limit will make the road safer for more vulnerable road users like pedestrians and cyclists. There is no funding within this project to upgrade walking and cycling facilities.
Future on/off ramp south of Warkworth	Implement this on/off ramp now (rather than in the future) rather than reducing speeds south of Warkworth. Omission of this on/off ramp is short-sighted.	At this stage, we do not expect enough demand for north-facing ramps for several years and therefore they are not included in the current project. North-facing ramps also present a number of

If reducing the speed limit, need southbound off-ramp on new motorway to provide viable 100km/h alternative. If reducing the speed limit, need challenges and environmental challenges and would have a significant cost. The current road designation has enough space for future ramps should they be			
	•	southbound off-ramp on new motorway to provide viable	challenges and would have a significant cost. The current road designation has enough space for

DECISION

The submissions did not identify any issues that we had not already considered, and we have made our decision to proceed with the speed limit changes that we proposed during consultation. The new speed limits will come into force on 14 June 2021 and are outlined in the table below.

We will implement the speed limit changes in a two-phase approach to align with the expected completion of the roundabout and link road to the new Ara Tūhono – Pūhoi to Warkworth in mid-2022.

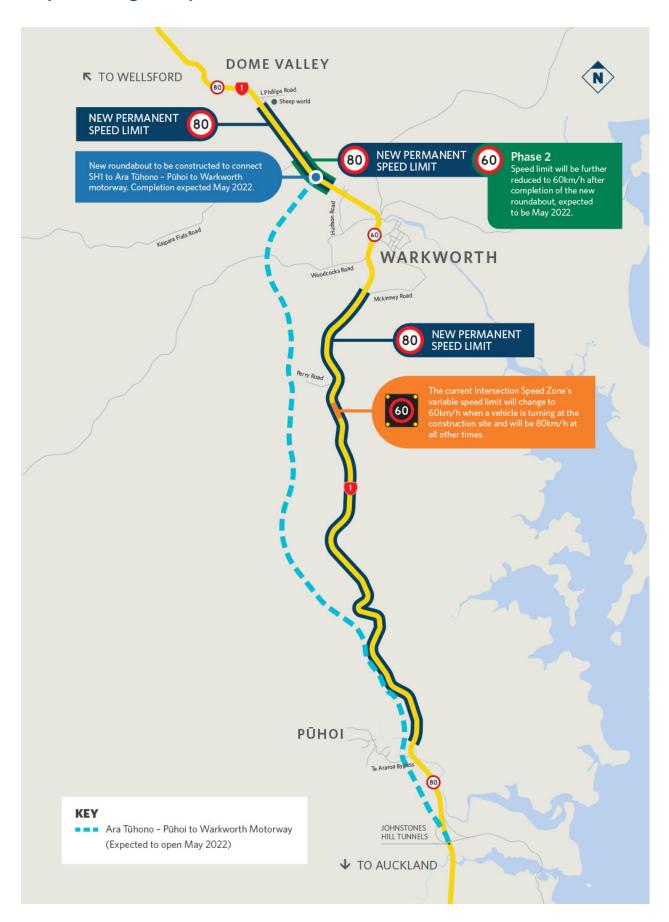
- Phase One new speed limits will come into force on 14 June 2021, as set out in the table below
- Phase Two (after construction of roundabout around mid-2022) the speed limit will be further reduced to 60km/h from 200m north of Kaipara Flats Road to 365m north of Hudson Rd. We will notify you of this phase two speed limit change at that time.

New speed limits for SH1 L Phillips Rd to Pūhoi from 14 June 2021 (Phase One)

Location	Existing speed limit	New speed limit from 14 June 2021
SH1 North of Warkworth	100km/h	80km/h
An extension of the 80km/h speed zone (that begins at Wayby Valley Rd) from 180m south of L Phillips Road to 365m north of Hudson Rd, the start of the current 60km/h at the north end of Warkworth.		
SH1 South of Warkworth	100km/h	80km/h
From 60m south of McKinney Road, the end of the 60km/h at the south end of Warkworth, to 350m north of Pūhoi Road, the current 80km/h change point for the start of Johnstone's Hill Tunnel.		
SH1 South of Warkworth	Variable 70km/h	Variable 60km/h
From 285m south of Perry Road to 715m south of Perry Road, locations are the same as currently installed.	when a vehicle is turning at the construction site. 100km/h at all other times.	when a vehicle is turning at the construction site. 80km/h at all other times.

When the new speed limits take effect, the area will be monitored to ensure the new speed limits are working effectively.

Map showing the speed limits



SUBMISSIONS

You can view the submissions we received for this speed review here.

RELATED CONSULTATION – ARA TŪHONO – PŪHOI TO WARKWORTH MOTORWAY

At the same time we consulted on these speed limit changes in May-June 2020, we also sought people's feedback on a proposal to toll the new Ara Tūhono - Pūhoi to Warkworth motorway which is currently under construction and scheduled to open in May 2022.

At the time, we made it clear that while the tolling and speed reviews were separate proposals, the consultations were run in parallel to ensure people understood the full picture of plans for the area and could consider the speed review and tolling proposals together and give more informed feedback.

While there has been no decision yet on tolling, if the new motorway is tolled, people can choose to travel on the existing SH1 which will be maintained as a free, safe alternative route.

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